



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES, AND  
TOXIC SUBSTANCES

PC Code: 118203

DP Barcode: 349858, 354473, 360246

**MEMORANDUM**

June 26, 2009

**SUBJECT:** **Saflufenacil:** Transmittal of Data Evaluation Records for Environmental Fate Studies.

**TO:** Kathryn Montague, Product Manager  
HB/RD (7505P)

**FROM:** Greg Orrick, Environmental Scientist  
ERB4/EFED (7507P)

**THROUGH:** Elizabeth Behl, Chief  
ERB4/EFED (7507P)

*Greg Orrick 6-26-09*  
*EBM 6-26-09*

This memo is to inform you that fifteen (15) DERs for saflufenacil are finalized. Thirty-five electronic files are associated with the fifteen finalized DERs. Study MRIDs and classifications are listed in **Table 1** below.

**Table 1. DERs and Classifications for Environmental Fate Studies of Saflufenacil.**

MRID	Study Type	DER Electronic File Name	Study Classification
47127823	Hydrolysis	118203 47127823 835.2120.doc 118203 47127823 835.2120 Calcs.xls 118203 47127823 835.2120 Figures.pdf	Acceptable
47127824	Aqueous photolysis	(No DER: replaced by MRID 47699901)	Upgradeable
47699901	Aqueous photolysis	118203 47699901 835.2240.doc 118203 47699901 835.2240 Calcs.xls 118203 47699901 835.2240 Figures.pdf	Acceptable
47127825	Soil photolysis	118203 47127825 835.2410.doc 118203 47127825 835.2410 Calcs.xls 118203 47127825 835.2410 Figures.pdf	Acceptable
47445901	Aerobic soil metabolism	118203 47445901 835.4100.doc 118203 47445901 835.4100 Calcs.xls 118203 47445901 835.4100 Figures.pdf	Acceptable



2083838

OPPTS Guideline	Data Requirement	Submitted Studies (MRID)	Study Classification	Deficiencies and Comments	Sufficient for EFED?	Current Additional Data Need
				saflufenacil, rather than the parent compound. Levels of detection and quantitation were not reported.		
835.6100	Terrestrial field dissipation	47128234	Acceptable	No significant deviations from good scientific practices or the objectives of Subdivision N guidelines were noted.	Yes	None
		47128235	Acceptable	No significant deviations from good scientific practices or the objectives of Subdivision N guidelines were noted.		
		47128236	Supplemental	Samples were not analyzed to a sufficient depth to define leaching of saflufenacil at Site 2. Run off of the test compound was not studied at the test sites, although total water inputs exceeded 131% to 846% of the historical average rainfall.		
	Storage stability	47128237	Acceptable	No significant deviations from good scientific practices or the objectives of Subdivision N guidelines were noted.		
	Storage stability	47560309	Acceptable	No significant deviations from good scientific practices or the objectives of Subdivision N guidelines were noted.		
	Analytical method in soil	47699902/ 47127832	Supplemental	This ECM and its associated ILV met all criteria for a scientifically valid method. However, the reported LOQ was found to be 0.01 mg/kg for all analytes, which is significantly higher than the lowest phytotoxic endpoint in soil.		
		47127831	Upgradeable	Study is replaced by MRID 47699902.		
835.6200	Analytical method in water	47127928	Upgradeable	Submission is incomplete: analytical method cannot be reviewed without an independent laboratory validation.		
	Analytical method in water	47699903/ 47523803	Acceptable	No significant deviations from good scientific practices or the objectives of Subdivision N guidelines were noted.		
		47523802	Upgradeable	Study is replaced by MRID 47699903.		
850.1730	Fish bioaccumulation	47127909	Supplemental	Fish tissue and water samples were not analyzed for [ <sup>14</sup> C]saflufenacil or its transformation products, which lends uncertainty to the study results.	Yes	None

MRID	Study Type	DER Electronic File Name	Study Classification
47127826	Aerobic soil metabolism	(No DER: replaced by MRID 47445901)	Upgradeable
47611201	Anaerobic soil metabolism	118203 47611201 835.4200.doc 118203 47611201 835.4200 Calcs.xls 118203 47611201 835.4200 Figures.pdf	Supplemental
47127827	Aerobic aquatic metabolism	118203 47127827 835.4300.doc 118203 47127827 835.4300 Calcs.xls 118203 47127827 835.4300 Figures.pdf	Supplemental
47127828	Anaerobic aquatic metabolism	118203 47127828 835.4400.doc 118203 47127828 835.4400 Calcs.xls 118203 47127828 835.4400 Figures.pdf	Supplemental
47127829	Batch equilibrium	118203 47127829 835.1230.doc 118203 47127829 835.1230 Calcs.xls	Acceptable
47127830	Batch equilibrium	118203 47127830 835.1230.doc 118203 47127830 835.1230 Calcs.xls	Supplemental
47128234	Terrestrial field dissipation	118203 47128234 835.6100.doc 118203 47128234 835.6100 Calcs.xls	Acceptable
47128235	Terrestrial field dissipation	118203 47128235 835.6100.doc 118203 47128235 835.6100 Calcs.xls	Acceptable
47128236	Terrestrial field dissipation	118203 47128236 835.6100.doc 118203 47128236 835.6100 Calcs.xls	Supplemental
47128237	Storage stability	118203 47128237 835.6100 SS.doc	Acceptable
47560309	Storage stability	118203 47560309 835.6100 SS.doc	Acceptable
47127909	Fish bioaccumulation	118203 47127909 850.1730.doc 118203 47127909 850.1730 Figures.pdf	Supplemental

Also, an environmental fate summary was submitted in MRID 47445904, which revises MRID 47127833. A DER was not prepared for this non-guideline report (**Table 2**).

**Table 2. Saflufenacil Non-guideline Report.**

MRID	Study Type	DER Electronic File Name	Study Classification
47445904	Report	(No DER)	Extraneous submission
47127833	Report	(Replaced by MRID 47445904)	Unacceptable

The following table identifies studies by MRID that offer data for each guideline requirement (**Table 3**). Also listed are study classifications, classification justifications, whether or not the studies are collectively sufficient for the data requirement, and whether or not additional data are needed in order to support risk assessment.

**Table 3. Status of Environmental Fate Data Adequacy for Terrestrial Food Uses of Saflufenacil.**

OPPTS Guideline	Data Requirement	Submitted Studies (MRID)	Study Classification	Deficiencies and Comments	Sufficient for EFED?	Current Additional Data Need
835.2120	Hydrolysis	47127823	Acceptable	The co-solvent concentration and limits of detection and quantitation were not reported.	Yes	None
835.2240	Aqueous photolysis	47699901	Acceptable	Limits of detection and quantitation were not reported.	Yes	None
		47127824	Upgradeable	Study is replaced by MRID 47699901.		
835.2410	Soil photolysis	47127825	Acceptable	A major transformation product (Product 8, maximum 12.50-16.15% of the applied) was isolated but could not be conclusively identified. Limits of detection and quantitation were not reported.	Yes	None
835.4100	Aerobic soil metabolism	47445901	Acceptable	The extraction procedure appeared to lack rigor. Single samples were collected at most intervals. Limits of detection and quantitation were not reported. The concentration of $^{14}\text{CO}_2$ decreased on the final interval.	Yes	None
		47127826	Upgradeable	Study is replaced by MRID 47445901.		
835.4200	Anaerobic soil metabolism	47611201	Supplemental	Air-flow to the phenyl-label replicate sample series was uneven. During the anaerobic phase of the study, anaerobic conditions were marginal.	Yes	None
835.4300	Aerobic aquatic metabolism	47127827	Supplemental	Recoveries from the system treated with the uracil label were highly variable. Only one sample was collected at most intervals, so that between-sample variability could not be assessed.	Yes	None
835.4400	Anaerobic aquatic metabolism	47127828	Supplemental	Anaerobic conditions were marginal, as dissolved oxygen concentrations were up to 1.7 mg/L. For the uracil label treatment only, the material balance decreased to an average 69.8-75.7% of the applied at 91-364 days posttreatment. Calculation of the rate of dissipation of saflufenacil has some uncertainty since significant dissipation (35-50% of the applied) of saflufenacil occurred in both systems between the 30 and 62 day sampling intervals. Limits of detection and quantitation were incompletely reported.	Currently, yes.	None
835.1230	Batch equilibrium/aged leaching	47127829	Acceptable	Limits of detection and quantitation were not reported.	Yes	None
835.1240		47127830	Supplemental	The study was conducted using transformation products of		